LAMINATED SAND FILTERS
Filtering Equipment

Manufactured in Spain for
PQS Piscinas y Consumo SA

LAMINATED SAND FILTERS
Filtering Equipment

Filtration is an impotant part of pool maintenance. However, a high quality filtering equipment is only a part of the process and it must be accompanied by the correct chemical treatment to obtain the best results.

PQS Piscinas y Consumo SA is a specialiced manufacture of chemical products. Our brand has more than 50 years in the market and we know very well that a filtering equipment should be a question of prime consideration for any pool.

Thanks to be a part of ***GRUPO QP,*** we work strongly with our partner ***CORAL FILTROS Y ACCESORIOS SA,*** located in Granada (south of Spain) who produce an extensive range of LAMINATED FILTERS.

Our laminated filters are available in diameters from 500 mm to 900 mm with side-mount 6-way valve.

Characteristics:

- Laminated filter with polyester / fiberglass resin.
- ABS cover with screws.
- Pressure gauge and manual air purge valves.
- Red/Black colour.
- Withouth base, easy to intalate.
- Side-mount 6 ways valve.
- Maximum flow rate: 50 m^3/h.
- Manimum operating pressure: 1,5 kg/cm^2

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Ø	Height	m^3/h	6-Ways Valve	Silex	Flow Rate	Temp.	Code	Kg
Ø 500	630	10	1" 1/2	85 kg	50 $m^3/h/m^2$	50 °C	1105532127	30 kg
Ø 600	690	15	1" 1/2	150 kg	50 $m^3/h/m^2$	50 °C	1105531128	40 kg
Ø 750	830	24	2"	300 kg	50 $m^3/h/m^2$	50 °C	1105532129	50 kg
Ø 900	950	32	2"	450 kg	50 $m^3/h/m^2$	50 °C	-	60 kg

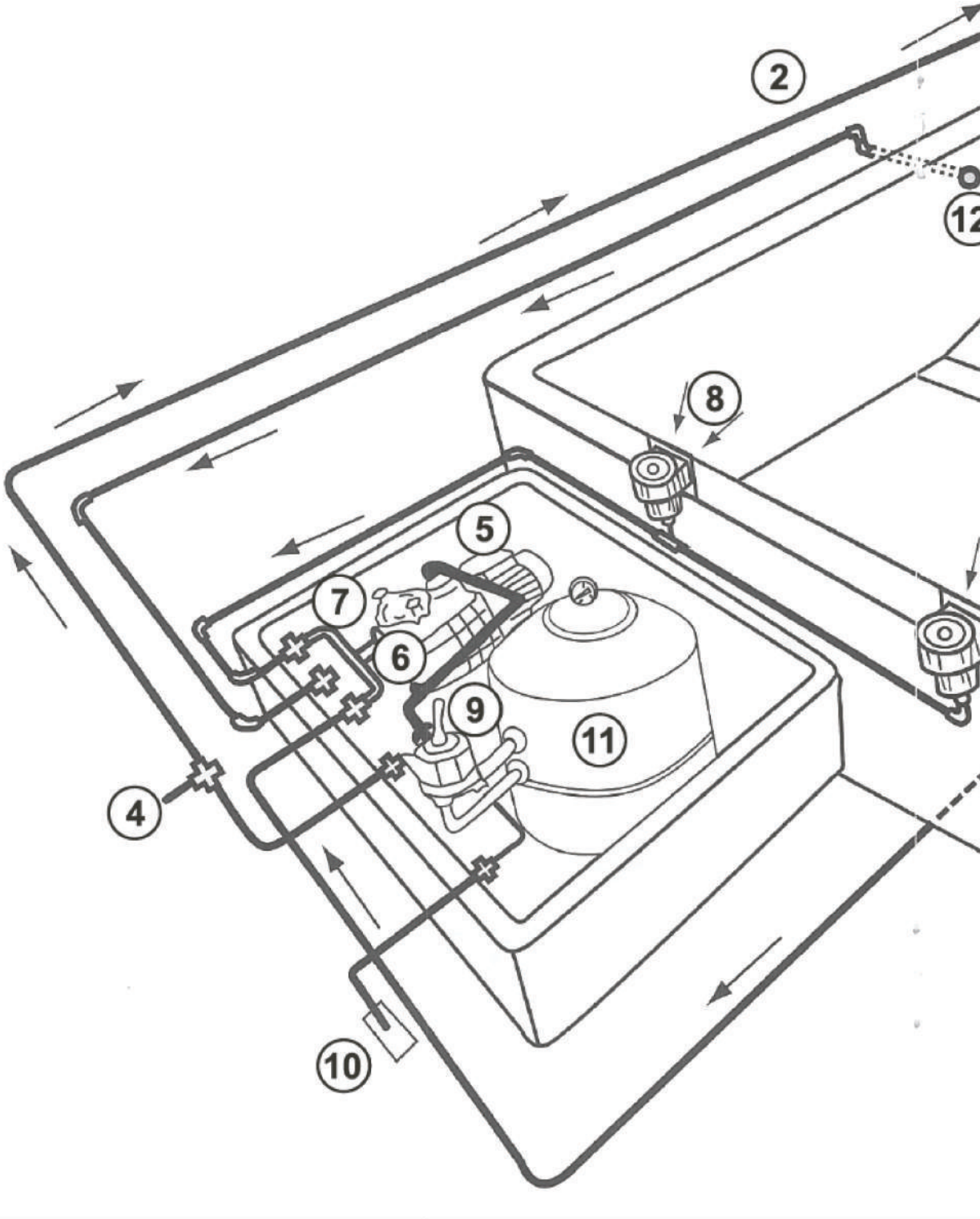
It is very important to ensure that the entire pool installation is appropiate for the cubic meters of water it contains and the volumes with which the accessories (nozzles, skimmers), filter and motor will be operating. Note that if this is not the case, the filter will receive the pressure from the motor and may suffer enormous stress to the point of breaking. In the event of doubt, always contact a professional.

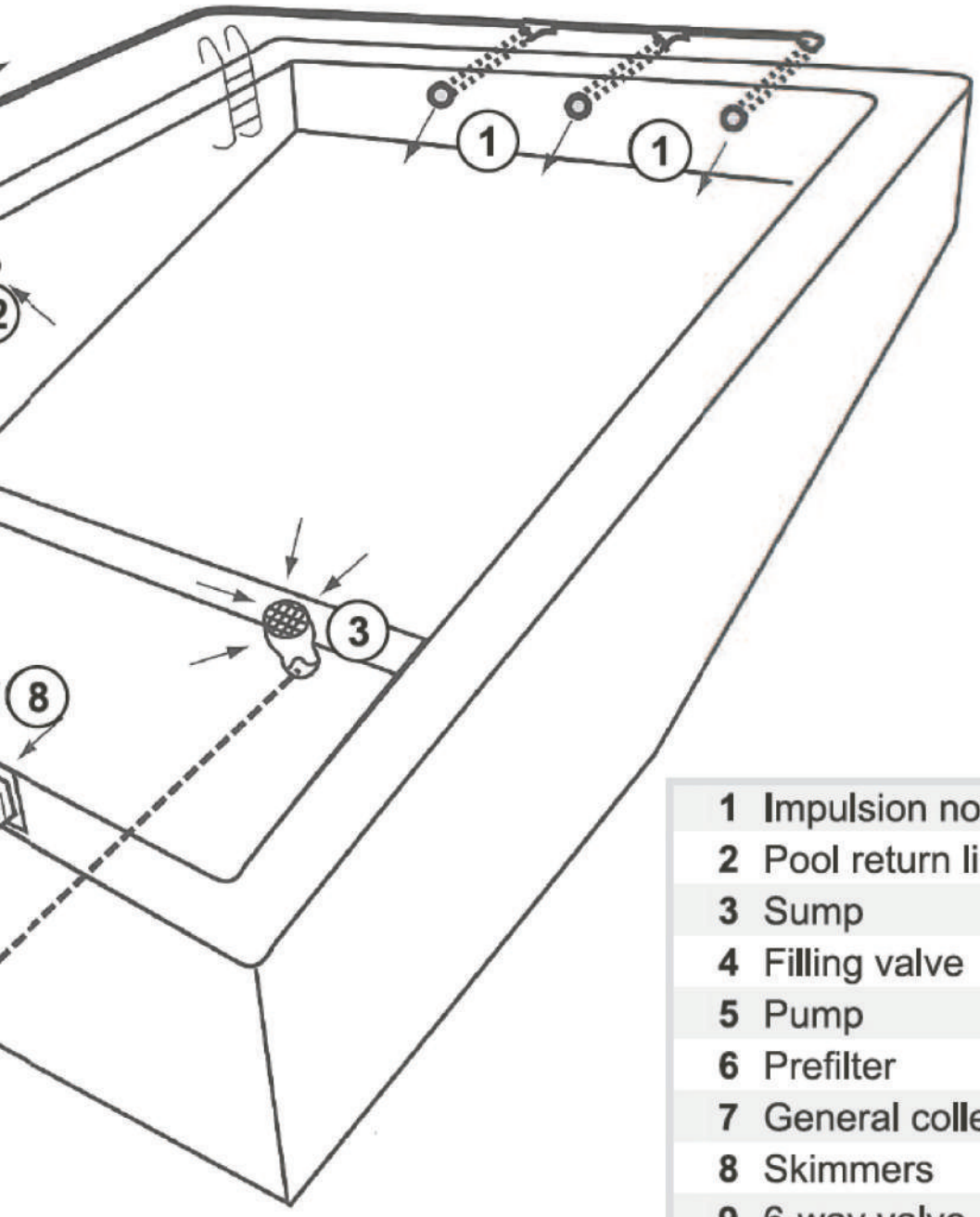
PQS Piscinas y Consumo SA and our partner, ***CORAL FILTROS Y ACCESORIOS SA,*** warrant this material for 2 years against all manufacturing faults. The warranty covers replacement of the material with new material from the factory or the distributor warehouse nearest to the zone.

This warranty doesn't cover material which has been handled or modified outside the factor or faults or breakages caused due to incorrect use, lack of cleaning, errors in handling the filter or valve or wear resulting prom use.

This warranty declines all liability for damages caused during transport. Please, notify the transport company immediately if the material arrives in a damaged condition.

STANDARD INSTALLATION DIAGRAM





1	Impulsion nozzles
2	Pool return line
3	Sump
4	Filling valve
5	Pump
6	Prefilter
7	General collector drain
8	Skimmers
9	6-way valve
10	Drain
11	Bottom cleaner intake
12	Limpia fondos

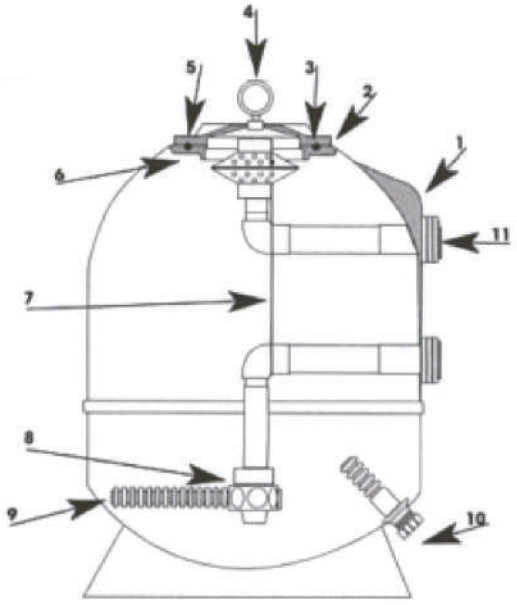
INSTALLATION

Installation should be done as close as possible to the pool and unless there is a drain in the site, at a distance below the water surface.

The location must be in a flat, protected, ventilated place with sufficient space for use, installation and subsequent maintenance.

After placing the filter in its final location, install the selector valve, in all cases ensuring that the filter union joints are properly secured. After doing this, make the three connections to the pump, drain and return. Put in position and screw the pressure gauge manually; no tools are required.

Check that no water is leaking from the joints or screws and that all the elements are correctly adjusted.



LAMINATED FILTERS

1	TANK
2	COVER
3	O-RING
4	MANOMETER
5	NUT AND WASHER
6	TOP DIFFUSER
7	AIR BLEED VALVE
8	DISTRIBUTOR
9	NOZZLE PLATES
10	DRAINING OF WATER
11	FILTER PASS THROUGH DUCT

LOADING THE SAND

Unscrew the filter cover screws. Remove the cover and joint.

Remove the diffuser from the tube (part n° 6). It is advisable to cover the tube once removed, to prevent the sand from entering it when emptying.

Fill 1/3 of the tank with water and using a bucket or another utensil, empty the sand carefully, trying not to damage the interior of the nozzle plates (part n° 9). The kilograms of sand are different for each filter, depending on their capacity and are indicated in their characteristics.

Once filled with sand (level more or less near the first pass through duct, put the diffuser back in place and leave the bleed valve (part n° 7) in the correct position, ensuring that it is outside the sand. This is important as if it is inside, it could cause sand to enter the pool.

Clean the joint housing and put it in position. Put the cover on and tighten the screws.

IMPORTANT: THE PUMP MUST BE TURNED OFF
IF MAKING ANY MOVEMENT OR CHANGE IN THE POSITION OF THE VALVE

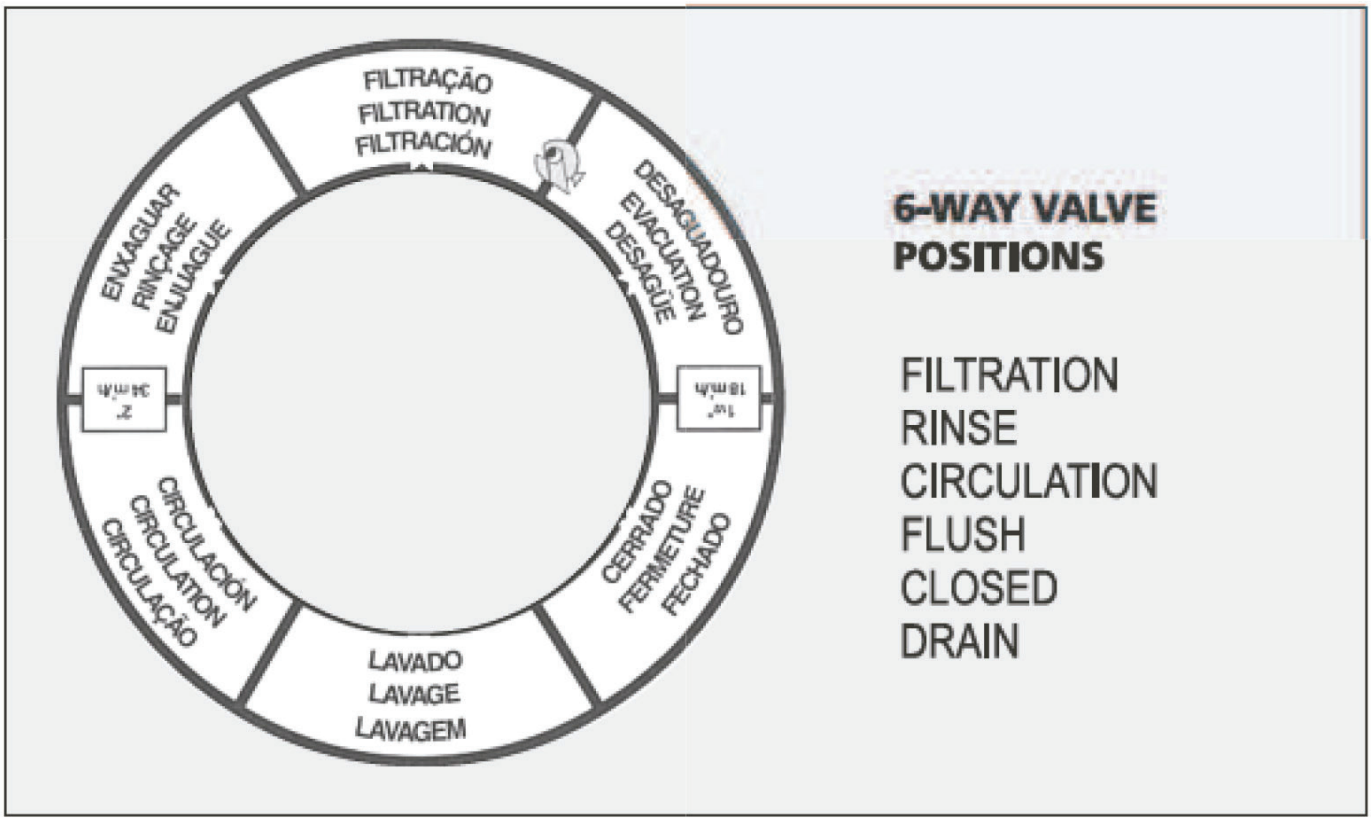
START-UP

After filling the filter with sand, proceed as follows:

1. Open the tube aspiration valves that enter the pool (skimmer and sump).
2. Set the selector valve to FLUSH (see valve positions diagram).
3. Connect the pump for 5 minutes.
4. Stop the pump and change the selector valve to the RINSE setting.
5. Reconnect the pump for 1 minute.
6. Stop the pump and set the selector valve to the FILTRATION setting.
   It is now ready to be put into operation.

LAMINATED SAND FILTERS
WAY VALVE FUNCTIONS

6-WAY VALVE POSITIONS



FILTRATION

1. With the pump stopped set the selector valve to Filtration.
2. Turn on the pump.
3. Observe the manometer, as it indicates the pressure exerted on the filter. A normal operating pressure would be between 0.5 and 1.4 bar (green and yellow zones of the manometer). When it exceeds 1.4 (red zone) the circuit must be flushed with sand.
4. The valves at the bottom of the pool and skimmer are regulated depending on the dirt that is visible on the water surface (floating and other material).

FLUSHING THE FILTER

When filtering, all the dirt is trapped in the sand, meaning that the passage of the water is reduced inside it. This leads to an increase in the filter operating pressure. When the pressure reaches 1.5 bar (red zone on the manometer) it must be FLUSHED with sand. To do this, proceed as follows:

1. Stop the pump and put the lever on the FLUSH setting.
2. Restart the pump and let it function until the water runs clear through the viewer (approximately 3').
3. Stop the pump and put the lever on the RINSE setting. This will cause the dirt to run directly to the drain. Let it operate for 1'.
4. Stop the pump and reset it to the FILTRATION setting.

CIRCULATION

This setting makes the selector valve pipe the water from the pump directly into the pool, without passing through the filter.

CLOSED

This setting is used to close the passage of the water from the filter to the pump, so that the pump prefilter can be opened (hair-collection basket).

DRAIN

If there is no drain at the bottom of the pool, the water can be drained with the pump in this position. Before connecting it, ensure that the skimmer valves and bottom cleaner are closed. With the sump valve open, connect the motor. The prefilter and sump water pipes must be filled with water for the valve to perform the aspiration.

FILTER MAINTENANCE

If the filter is used correctly and the instructions are observed, practically no maintenance is required. Only the sand must be taken into account. Approximately every 2 years, check the sand level and fill in the event of loss or as needed. It is advisable to change the sand every 3 years (whenever its state makes this necessary).

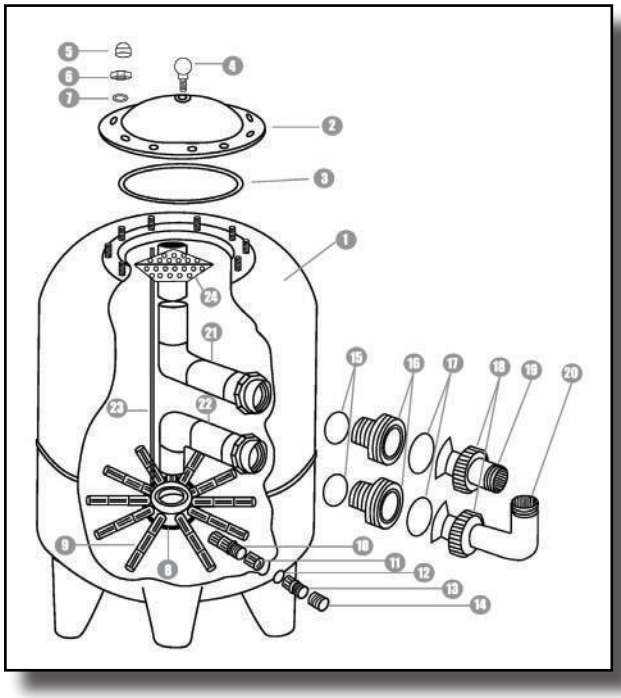
The correct sand grain size (silex) is between 0.4 and 0.8 mm (always use the appropriate type of sand as recommended by the manufacturer).

POTENTIAL DOUBTS

a. A rise in pressure is observed in the manometer: this tells you that the sand is dirty and the water cannot pass through, which causes the pressure to rise. Flush with sand and then rinse, as if not drained, that water will remain in the pipe and on returning to the filter mode, the dirt will be returned to the pool through the nozzles.

b. The filter flow is extremely reduced or the bottom cleaner has little force: this may be due to the hair-collection basket in the pump being full (it must be cleaned thoroughly on a regular basis). Another reason could be that the sand is dirty. On entering the filter to be cleaned, the water has no room to pass through and this causes the pressure to rise and the filter flow to be reduced. In this case, proceed as indicated in the previous case (it is important to always rinse after flushing).

SPARE PARTS



Nº	CÓDIGO	DESCRIPCIÓN	Ud
2	91012001	COVER FILTER	1
3	91012005	O.RING - COVER FILTER	1
4	901012008	MANOMETER - PRESSURE GA	1
10-14	901012011	DRAINING OF WATER	1
12-13	91012013	PASAMUROS 25 mm + TORICA	1
15-16	91012014	PASAMUROS 50 mm + TORICA	1
15-16	91012015	PASAMUROS 63 mm + TORICA	1
9	91012018	NOZZLE PLATES 140 mm F. 500 / 750	4
9	91012019	NOZZLE PLATES 200 mm F. 600 / 900	4
24	***	DIFUSOR SUPERIOR F.500/600	1
24	***	DIFUSOR SUPERIOR F.780/900	1
8	91012024	DISTRIBUTOR 50 mm F.500/600	1
8	***	DISTRIBUTOR 63 mm F.780	1
8	***	DISTRIBUTOR 75 mm F.900	1
5-6-7	901012031	DRAIN COVER + O-RING	1
15	91012038	O-RING PASAMUROS 50 mm	1
	***	BOTTOM MANGUITO F. 2"	1
15	***	O-RING PASAMUROS 63 mm	1
	91012047	BOTTOM MANGUITO F. 1,5"	1
11	***	MANGUITO 3/4"	1
18	923012058	NUT LINK TO VALVE 1,5"	1
19	923012059	STRAIGHT LINK TO VALVE1,5"	1
18	923012060	TUERCA ENLACE DE LA VÁLVULA 2"	1
19	923012061	STRAIGHT LINK TO VALVE 2"	1
20	923012062	LINK ELBOW VALVE 1,5"	1
20	923012063	LINK ELBOW VALVE 2"	1
21	91012056	TOP ELBOW F.500	1
22	91012057	BOTTOM ELBOW F.500	1
21	***	TOP ELBOW F.600	1
22	***	BOTTOM ELBOW F.600	1

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